THE ROLE OF COMMUNITIES IN INNOVATIVE WATER MANAGEMENT: SUSTAINABILITY GOVERNANCE IN THE EMERGING COUNTRY

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Abstract

South Africa's municipalities have been called upon to provide potable clean water and to empower local communities to participate in water supply management in view of the Sustainable Development Goals (SDGs) of the United Nations. However, despite such efforts, access to piped water is dwindling and disparities in the distribution of water are growing (Mkize, 2021). This paper aimed to explore the existing policy and institutional frameworks that enhance or inhibit communities' roles as water services intermediaries in the Eastern Cape and Free State provinces of South Africa. This article adopted the qualitative research methodology in presenting the findings and the analysis of data from communities and government and non-governmental organisations (NGOs) officials' narratives on the factors that enhance or inhibit communities' participation in water management. The findings highlight that, despite South Africa's elaborate legal frameworks for water governance, South Africa has not managed to achieve water equity or to engage meaningfully with beneficiary communities as part of water management. Water inequalities are still predominantly characteristic of formerly excluded areas in the villages, townships, and informal settlements, and have grown in tandem with overall social and economic inequalities that are making South Africa the most unequal country in the world.

Keywords: Good Governance, Water Inequality, Developing Country, Governance, Participation, Empowerment, South Africa

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1. INTRODUCTION

participation and capacity building of The communities in water supply and provision are fundamental to the quest of meeting basic needs and affecting the right of access to the communities and sustainable water management (Cole, Bailey, Cullis, & New, 2018). Active participation of communities has the potential to complement the existing water provision institutions bv mobilising local people and providing opportunities for aligning the needs of the communities with the whole process of water management in service delivery, thereby engendering a sense of ownership and accountability (United Nations [UN], 2018).

This paper aims to explore the factors that enhance or inhibit the participation of communities in water management in Mbizana and Ngwathe local municipalities. The objectives of this paper are to explore the communities' narratives in relation to issues of ownership and accountability in community-owned and non-community-owned water schemes: evaluate the communities' to understanding of their role in the sustainable water service provision and how it intersects with their role as water services intermediaries and to assess the factors that hinder the establishment of the participation of communities in water management. The investigation sought to answer the main question of the study: How do the existing policy and institutional frameworks enhance or communities' role as water services inhihit intermediaries in the Eastern Cape and Free State provinces in South Africa? The point of departure for this paper is that South Africa has an elaborate framework of policies and programmes that have been put in place to broaden access to water and to integrate local communities in water management in their local areas. Water is recognised by these policies as a human and economic right and as a basic need to enhance the livelihoods of South Africans, with access to water being seen from interventionist perspective in addressing an socioeconomic inequalities in the country.

Community water management has been identified in the water legislative framework as a strategy for community participation. However, despite such efforts at national and local government levels, access to piped water is dwindling and disparities in the distribution of water are growing (Mkize, 2021).

Sustainable water management must necessarily involve communities. The Sustainable Development Goal (SDG) 6 of the United Nations (UN) is a goal focused on water and it covers issues of increasing access to water, sanitation, and hygiene; and addressing issues of water stress, water quality, integrated water management, and ecosystems. The goal also recognises that meeting an SDG on water, and any other sustainable development goal, will require all societal actors, including communities and the business sector to take action by committing resources, skills, and expertise. Target 6.8 of SDG 6 calls for the support and strengthening of the participation of local communities in improving water and sanitation management. According to the UN (2015), "the most important lesson is that the sustainability of projects necessarily requires strengthening community participation and empowerment, linked to municipal management processes while considering the issues of water, hygiene, sanitation, and health education as skills" (p. 20). Communities, through their representatives, should meaningfully participate in decision-making with respect to major water decisions planned or proposed for their areas through setting development priorities and opposing developments that are harmful to the local environment and culture of the community. It is clear from the above that SDG 6 strongly advocates for the participation of local communities in water supply management (UN, 2018).

increasing complexity of The water management challenges has necessitated a move towards a more inclusive bottom-up approach which fosters greater participatory involvement of stakeholders and builds bridges between government leaders and citizenry. Such a participatory approach is important for addressing barriers to water and sanitation management by recognising and incorporating the knowledge, skills, and experiences of local people. Engaging local communities as key stakeholders in water management helps to address issues related to their well-being and may help in the effective delivery of water services.

The article is structured as follows. Introduction, Section 1, is followed by Section 2 which presents the literature review. It is followed by Section 3 which demonstrates the methodology that underpins the study. Findings and discussion are presented in Section 4, and finally, Section 5 provides a conclusion and recommendations.

2. LITERATURE REVIEW

South Africa continues to battle with growing social and economic inequalities that are affecting the management of scarce resources, including the provision and distribution of water (Cole et al., 2018). According to Statistics South Africa (2016), only 63.9% of the nation's households are satisfied with the quality of water-related services — down from 76.4% in 2005.

About 3.7% of households still have to fetch water from rivers, streams, stagnant water pools and dams, or wells and springs (Statistics South Africa, 2016). Water access inequalities are greater in rural areas, informal settlements, and shacks. Racial inequalities in water access amount to 69.1% access for black people and 94.8% access for white people in the country (Statistics South Africa, 2019). With the current COVID-19 pandemic, it has been revealed that nationally, 2000 communities do not have access to water (Mudombi, 2020).

Karuaihe, Mosimane, Nhemachena, and Kakujaha-Matundu (2014) opine that despite an initial orientation towards community management in the early 1990s, most municipalities, which are legally responsible for all water services to individual consumers, have chosen not to involve communities. Such challenges are a pointer to the need for water management to move from the traditional top-down approach to a more integrated focus based on community-led initiatives where communities will be empowered to manage their own facilities.

The participation of communities in water supply services stems from the fact that hydrological, economic, social and environmental



interdependencies occur within catchment (watershed) areas, it is within this geographical unit that integrated development and management of water resources is likely to be most successful (UN, 2018).

Further according to the UN (2018), the need to manage the water supply chain, the interdependence of water uses, and natural processes requires holistic catchment-based management, in which the use of natural resources and ecological and water protection takes place, while local community and scientific involvement is integrated, and appropriate organisational structures and policy objectives are put in place. The increasing complexity of water management challenges necessitates the empowerment of communities towards a more inclusive bottom-up approach that fosters greater participatory involvement of stakeholders as well as builds bridges between government leaders and the citizenry. Further details of participation are outlined in Table 1.

It is widely believed that promoting ownership of water schemes and land by beneficiary communities through participation, is most likely to generate sustainable results in terms of socioeconomic transformation (Chivanga & Kang'ethe, 2015; Ananga, Agong', Acheampong, Njoh, & Hayombe, 2021).

Type of participation	Characteristics
Manipulative participation	Pretence, in that nominal representatives of indigenous populations, have no legitimacy or power
Passive participation	Unilateral decisions without consulting indigenous populations
Participation by consultation	External agents define problems and processes through which information is gathered, thereby controlling the ways in which it is interpreted and analysed
Participation in material incentives	Indigenous populations participate by contributing resources in the form of labour in return for material incentives
Functional participation	External agencies encourage participation to meet predetermined objectives
Interactive participation	Participation by indigenous populations entails the exercising of a right in joint analyses, the development of plans for action, and the formation or strengthening of local institutions
Self-mobilisation	Indigenous populations take initiatives independently of external institutions to facilitate change

South Africa has sufficient legal instruments that promote community participation in water management (Vhumbunu, 2021). The participation of communities in water supply and provision is fundamental to the quest of meeting basic needs, affecting the right of access to water and ensuring the sustainability of water management as espoused in the constitution (Mkize, 2021).

Boakye and Akpor (2012) conclude that participation has become widely community accepted through legislation as a critical component of managing water resources in South Africa. In arguing for a participatory ethos in watershed management in Thailand, Heyd and Neef (2004) emphasise that participation and its forms, potentials, and problems raise the question of the optimal level of involvement of local people. These authors assert that community participation initiates a process of negotiation between the stakeholders affected by integrating individual, communal and national interests in a balanced way in the decisionmaking process. Participation of stakeholders is thus seen as having the potential for offering solutions for more efficient and sustainable management of water resources. Samah and Aref (2009) are of the view that participation can lead to empowerment. This paper focused on participation that leads to empowerment. Institutionalising meaningful participation of communities in water decisions that affect their lives from the grassroots level can contribute to meaningful community engagement and improvement in water services management.

3. RESEARCH METHODOLOGY

This study has adopted the constructivist paradigm in trying to understand the experiences of communities and their participation, the views of related institutions involved in water management, and the water management and policies shaping access to water and water services.

To adequately tap into the experiences of individuals and groups in the study areas, qualitative methodology techniques were used to collect data through interviews, discussions, and interactions with government and municipal officials, community leaders, non-governmental organisations (NGOs), and community focus groups. Document reviews and visual data analysis were also employed in the study.

A qualitative research methodology refers to the study of social phenomena through identifying, exploring, or describing the phenomena under study within the context of the research participant's experiences and views so as to get a holistic understanding of it. The qualitative research methodology is suitable for studies that intend to provide description, interpretation, and evaluation (Chivanga & Monyai, 2021).

Furthermore, the qualitative research methodology believes in subjectivity because the way people view the world is not objective. In fact, in the qualitative research methodology, a researcher may see and analyse the social world from a point of view that may be different from another researcher's point of view (Chivanga & Monyai, 2019). The qualitative research methodology was also chosen for this study because of the nature of the research questions. The differences between quantitative and qualitative research methodologies are outlined in Table 2.

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Item	Characteristic	Quantitative research methodology	Qualitative research methodology
1	Assumptions	Social facts have an objective reality	Reality is socially constructed
		Variables are complex, interwoven, and difficult to measure	Emphasises primacy of subject matter
2	Purpose	Generalisability	Contextualisation
		Prediction	Interpretation
		Causal explanation	Understanding participants' perspectives
3	View of human behaviour	Behaviour is regular and predictable	Behaviour is fluid, dynamic, social, situational, contextual, and personal.
4	Focus	Narrow-angle lens, testing specific hypotheses	Wide-angle and deep-angle lens, examining the breadth and depth of the phenomenon to learn more about it
5	Sampling	Determined prior to data collection and can only be added as the need arises.	Non-probability, purposive. Actors are chosen to illuminate emerging understanding and/or to check theories or hypotheses.
6	Data analysis	An analysis is done after data are collected, emphasises the "figure rather than the "ground", concentrates more on the hypothesis, and identifies statistical relationships.	An analysis is often done as data are collected. Context is extremely important. The analysis seeks to search for patterns, themes, and holistic features.

Source: Moyo et al. (2002, pp. 23-25).

A purposive sampling method was adopted for this paper. Purposive sampling is a non-probability, non-random form of sampling (Chivanga & Monyai, 2021). Participants were drawn strategically with regard to their relevance to the study. Purposive sampling allowed a researcher to select particular elements that were well informed about the topic under investigation. The main objective of a purposive sample was to produce a sample that of was logically assumed representative the population. Purposive sampling was deemed the best method for this paper as it was used to target the sample elements that were required for data collection. The sample for this paper had 117 participants. The data was gathered through in-depth interviews, focus group discussions, observations, and analysis of documents for completeness and clarity purposes. These findings, therefore, reflect the narratives of the community members and officials in the water sector on the research questions of the paper. Themes and sub-themes that were extracted from the face-to-face interviews and focus groups were presented and analysed in addressing the overall objective of the paper on exploring the factors that enhance or inhibit communities' participation in water management in Mbizana and Ngwathe local municipalities in South Africa.

4. RESULTS

4.1. Presentation of the findings

4.1.1. The communities' own narratives in relation to issues of ownership and accountability in water schemes

The sense of ownership and accountability to water projects in the two research areas is affected by feelings of dissatisfaction in terms of five issues, namely, lack of community participation, poor water quality and water scarcity, restrictions on income generation activities, loss of land and unemployment, and violation of the right to water.

4.1.2. Lack of community participation

The lack of community participation is at the root of the lack of sense of ownership and commitment to water supply projects in the two research areas. Community members interviewed through focus group discussions from the two municipalities did not attest to interactive participation and/or selfmobilisation in the water projects. In both research areas, participants indicated that they got to know about the water projects during the meetings that were called for this purpose prior to the implementation of the projects. In terms of ownership, the water projects are owned and are the responsibility of the municipality in the view of the communities. It was clear that the general disposition in water supply was that of communities reacting to the offers of the municipality. This is despite the insistence of the municipality officials in the two research areas on the communities' full participation in the water supply projects.

The lack of a sense of ownership of water supply projects goes hand in hand with the lack of accountability. In Alfred Nzo, the lack of commitment is reflected in the vandalism of water facilities such as taps, valve chambers, and metal leads. In addition, illegal water connections were pointed out as the most prevalent problem. Illegal yard connections entail individual households illegally drawing water from municipal pipes to their vards despite municipal by-laws that do not allow water connections. Another such research this problem participant indicated that is exacerbated by the fact that some of the people of standing in the community such as politicians, ward councillors, and some headmen are found to be in this violation of illegal water connections. This makes other members of the community follow suit despite the awareness campaigns by the municipality. These problems attest to an innate problem of the lack of commitment by the communities and their leaders, thus making it difficult for the municipality to enforce its own by-laws because the protocol for reporting a violation of by-laws in the municipality starts with the headman followed by the ward councillor and then the municipality.



In the case of Ngwathe Municipality in Fezile Dabi District, the lack of accountability manifests in failure to pay for water bills. The residents there feel that the quality of water that they get is very poor and, therefore, not worthy to be paid for. In Mbizana which is in Alfred Nzo, communities make it very clear that they do not want to pay for water hence the problem of theft of water facilities that are used for illegal yard connections as was indicated during interviews. Accordingly, the problem of non-payment is exacerbated by politicians, during political campaigns, some politicians promise community members free water, therefore, community members hold on to that and do not want to pay for water. They point the municipality back to the promises of free water.

The project beneficiaries welcomed the idea of community participation in water projects as water services intermediaries. This idea was supported by municipalities and organisations interviewed in the two research areas. The following figures depict the community narratives on the issues of ownership and accountability, water quality and quantity as discussed above, and intermediation followed by a discussion of the views from the municipalities and organisations.



Figure 1. Responses collected from focus group 1









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Figure 6. Responses collected from focus group 6

4.2. The dominating narrative of exclusion

The perspectives of communities regarding ownership and accountability to water research projects in the two research areas exhibit an overriding perception of exclusion from water supply decisions by authorities. This view of exclusion is engendered by the prevailing problems of lack of community participation, poor water quality and quantity, inability to engage in incomegenerating projects, loss of land and unemployment, and violation of the right to water, as discussed above. These problems are giving credence to the dominating narrative of exclusion within the communities.

These are fuelling a dominating narrative of exclusion where the communities are feeling excluded from important water supply decisions that affect their livelihoods. This brings about a feeling of disempowerment and a distance in relations between the communities and the authorities. The dominating narrative of exclusion negates the development of a sense of ownership and accountability for water supply projects.

Figure 7 groups together the consequences of the domination narrative of exclusion that are largely responsible for generating indifference towards water projects and leading to the lack of sense of ownership and accountability in the beneficiary communities.







4.4. Community participation

In terms of community participation, the views of the two municipalities are that participation takes place through what they call a consultation process. In the case of Ngwathe, it was indicated that ward councillors go to the communities to find out what their needs and priorities are for the coming financial year; that the planning inputs are a result of the needs identified by the communities. The ward councillors then go back to the communities again after their inputs have been incorporated into the plans. In Mbizana, the process includes the headman before the ward councillor. The role of the headman in development projects and political processes is so important that it determines the success or failure of a project. However, there was one municipality representative, who expressed that communities are consulted at the end of the planning process to inform them of the plans and to buy their input.

In Ngwathe, the official X indicated that, in addition to the conventional approach of participation through councillors, his department participation model developed has а in the municipality that comprises community-based forums that consist of community members who are not of any political affiliation. The idea is that as and when there is a particular challenge, forum members can alert the communications unit which then links them up with the relevant person in the municipality, be it water, electricity, etc. The official X went on to point out, "Basically we want to respond rapidly to any challenges affecting water or anything in the community. As part of the communications strategy, we have introduced municipal services on social media, we are running it on Facebook and WhatsApp. And as a communications unit, we are responsible for the functioning of these particular social media groups. In those social groups, we have senior officials from the municipality, we have councillors, and we have ordinary members of the community from different wards. They advise us on anything; should there be any water leak or water absence in any particular area they throw it in the group and immediately we see it and we advise the water team to respond and as and when they respond; they take images from the ground, they respond with images, evidence, in these particular social media".

In addition, the official X informed the research team that his department is also involved in establishing different advisory forums which are made up of different categories of people such as educators and health professionals who are responding to social issues at the local clinic, ordinary people who are working for community works programme (CWP), unemployed young people, pensioners as part of the advisory committee to the councillor, apart from the ward committee. The communications unit in the municipality also established street committees. has These committees focus on different needs in their streets such as funerals, but the main idea is to keep them organised and to get them to work with the municipality to identify other needs such as unemployed students, struggling elderly people, health care needs, etc. Accordingly, this is aimed at encouraging community participation and making them see that their concerns are being addressed. "These civil structures we bring them on board to form part of our communications strategy. We are working with Government Communications and Information Systems (GCIS) and we have a local office here in Ngwathe" (Official X).

Another research participant was of the view that community participation has to be based on principles that will build a sense of ownership and accountability towards projects in communities. Accordingly, the first principle is to assure a thorough process of buy-in from influential people from the local communities, for example, chiefs and headmen. The second one is to assure negotiation on benefits, like employment, and to give priority to the beneficiary community. The third is to train the water committees on how to sustain and maintain the water schemes and on water quality and quantity in the case of boreholes. Fourth, women and youth should constitute a larger percentage of the committees. Providing infrastructure without involving communities will lead to the vandalism of infrastructure. Excluding communities discourages ownership of water projects. "Ownership is lacking in the communities mainly because of exclusion. Excluding the communities and chiefs from the initial stage leads to the lack of ownership while involving communities from the initial stage promotes ownership. Ownership is the key to the sustainability of water schemes. Also, that lack of truth among project implementers discourages ownership of water projects by communities. Participation brings understanding to the communities and reduces the toyi-toyi" (Participant Y from NGOs).

The research participant stressed that the right timing of projects usually results in successful implementation. She stated, "In South Africa, there is a tendency that most projects are initiated around the time of political campaigns. The implementation of such projects is accompanied by promises that end up not holding after elections and creating orphan projects. After the political campaigns communities remain holding on the promises that are not backed up by financial or political commitments. This thing needs to be avoided because it is hindering the development of trust and commitment to projects" (Participant Y). She indicated that much work was done with communities on the ground, particularly in KwaZulu Natal province. Experiences in this work have shown that the approach to engaging community members will depend on the prevailing circumstances within the communities. For instance, in the Eastern Cape, the role of chiefs and headmen is central to development projects more than is the case in KwaZulu Natal. Community projects that overlook chiefs and headmen are unlikely to succeed. The participant put more emphasis on the approach used for community engagement and training. She stressed that training is crucial for the empowerment of community members to run projects and it helps to build interest and ownership of projects by community members.

4.5. The communities' understanding of their role in the sustainable water management

Community participation is seen as an element of sustainability. The findings discussed under the first theme above on ownership and accountability are a clear indication that the communities in the two



municipalities have a very limited understanding of their role in sustainable water services provision. The obstacles of lack of participation in decisionmaking, poor water quality and quantity, loss of property and unemployment, inability to engage in income generation activities and violation of the right to water are looming large in the narratives of the communities and are clouding the understanding of the role that communities can play in water services management. As things are now, these communities are passive recipients of water services from the municipalities.

Accordingly, the significance of sustainable water management lies more in the influence on the institutional dynamics of water management and in creating a platform for dialogue between key stakeholders of water management. There was overall acceptance and enthusiastic welcome of the issue by the communities in managing water from all categories of research participants, the communities themselves, municipalities, and the other stakeholders. Equally, there was mutual feeling in both municipalities regarding the role of intermediation. In both areas, the research participants indicated that they would need training to equip them for this role.

4.6. Communities

Communities in Mbizana and Ngwathe local municipalities are willing to participate in the management of water. The findings reveal that these communities would be more comfortable having representatives in the management of water who are members of their own communities from their midst rather than what they perceive as "people who spent most of their time in their offices without coming to the communities to meet with the community members and seeing what is taking place" (Participant Z at Mbizana community meeting). The communities indicated that they want local representatives in water management who understand their water problems better than outsiders. This view was more pronounced in Mbizana than in Ngwathe. There is a commonly shared feeling within the communities in the two research areas that water project beneficiaries are not involved in making important decisions in the management of water services. There is a deepseated feeling of "us and them" when relating to the municipality. Communities in both provinces asserted that they are willing to be managers of their own water. They said that they would need training for this, for example, on how to fix leaking taps and pipes and on how to present their issues, and how to negotiate. They stated that this will be easier for them than to wait for the municipalities to do everything for them.

4.7. Municipalities

Municipalities are also ready to embrace the idea of communities acting as water services intermediaries. This was clearly expressed in the comments from municipality officials in the two areas. From Ngwathe Municipality official, "I agree 100 per cent with that one. You know how this thing will assist us as a municipality; in some areas, there may be challenges that we don't know about but if we have someone in the communities specifically for water. So, I especially think that for the local challenges that we have it would really help us to have water services intermediaries. We wouldn't want people to act as opposition but people that would assist us to improve service delivery in terms of supply and water and management. I was at a meeting last Sunday and people were telling me that it's been 3 months since they had water, others will tell you it's been 3 years. So I asked them why they did not report".

Councillors in the water-scarce areas of Parys were of the view that if communities become water put pressure intermediaries will it on the management to do their work and it will reduce demonstrations because people will be aware of what is happening. Also, that it will help to keep communities informed of what is happening with the water supply. One of the councillors expressed that when there are problems with water in his area, residents converge at his house for answers, that, if they could be involved in water management it would help to ease the tensions.

From the side of Mbizana, the municipality official underscored that there is no sense of ownership of water projects on the side of communities. He made this comment, "Community participation in the management of water is a worthwhile idea because it will help us to know the urgent needs of the community, that, for instance, sometimes officials may decide to put the priority as a borehole drilling which might not be a community priority yet at times the community's priority might be a road". His view was that decisions are being imposed on communities yet communities have their own priorities and that this is sometimes a source of strikes. He suggested that a policy shift that promotes a sense of ownership of water schemes and the management of water by the communities was the way to go.

4.8. Top-down managerial approach

While the legislation aspires for a bottom-up approach to water management that is demanddriven, the practices of policy formulation and determination of community needs and processes are still lingering in the top-down approach where these processes are centrally formulated. The consultation of communities comes in the form of information on what has already heen determined, as was indicated by the communities in the two research areas. This practice in South Africa confirms the views of Chirenje, Giliba, and Musamba (2013) who point out, "while governments have accepted the need to either cede or devolve control and management of natural resources to the local communities, the communities are not part and parcel of the planning and budgeting which are crucial in decision-making. Communities were seen to be more involved in the implementation of natural resource management programs but lacked ownership of the projects. This causes lack of commitment to the programs and at times hostile reaction from the communities" (p. 10).

The rigidity of the supply-focused approach of water services management which is centred on the triad of provision and consumption crowds out the role of intermediation that can be brought about



by community participation. The challenges of lack of capacity in several areas of water services management faced by the two municipalities and the lack of meaningful community participation outlined above are pointers to the need for empowerment of communities to play the role of intermediation in the different levels of water services provision.

4.9. Success story of water management by communities in Lucene village in Matatiele

During data collection, the research team came across a success story of a bottom-up approach to a community water project in Lucene, Matatiele. Initially, the community water supply was from a borehole managed by the municipality. As the community was growing, the supply of water from the borehole became insufficient. The community gathered and agreed to take action to address the water shortage. They bought their own pipes and expanded the water source. They asked for technical assistance from the municipality terms of chemicals for testing in water. The municipality helped the community with testing water quality. The community is now managing their water and the municipality is helping with technical assistance. The community then choose their own representative who communicates directly with the municipality if they need any help. It was indicated by the Matatiele technical manager that the community is managing its own water without any challenges. As indicated in Table 3, the Lucene community is managing both the spring and the borehole and only calls the municipality when there is a technical challenge.

 Table 3. Lucene water sources

Water source	Initiator	Manager
Lucene spring	Community	Community
Lucene borehole	Municipality	Community

5. CONCLUSION

Despite its elaborate legal frameworks for water governance, South Africa has not managed to achieve water equity or to engage meaningfully with beneficiary communities as part of water management. Water inequalities are still predominantly characteristic of formerly excluded areas in the villages, townships, and informal settlements, and have grown in tandem with overall social and economic inequalities that are making South Africa the most unequal country in the world.

An added affliction is that these communities are not meaningfully participating in making decisions on water management and their needs are not adequately factored into the water supply decisions. This is in contrast to the SDG 6 requirement calling for water equity and the participation of beneficiary communities in the water management decisions that affect them.

Disparities in the allocation of water are still firmly entrenched along racial, gender, and ruralurban divisions — making water accessible to the privileged few. Water inequalities and exclusion are compromising the livelihoods of these marginalised communities and their overall social and economic development. The paper suggests the application of the ABCD model in reviewing participation procedures. For communities to play an effective role in mediation in water services as facilitators of negotiations and bridge builders, two issues need to be attended to urgently. These are the lack of management capacity on the side of municipalities and rethinking of the participation model that municipalities use to engage communities.

The form of community participation that is taking place in the two municipalities, as articulated by the municipal officials in the discussions above, is top-down. It is nominal and passive participation and is externally oriented. This form of participation has failed to engender a sense of commitment, ownership, and accountability among the beneficiary communities in the rural Mbizana and urban Ngwathe municipalities. In the nominal approach, project goals and processes of participation are defined and controlled by outsiders such as the municipalities. This is a source of dissatisfaction among the beneficiary communities in the Alfred Nzo and Fezile Dabi municipalities.

The narratives of the communities in the two municipalities in Alfred Nzo and Fezile Dabi exhibit a clear feeling of polarisation between the communities and municipalities. The interaction between them is far from being congenial, it is largely governed by technical statutory requirements of engagement and is fraught with suspicions. While on one hand, the municipalities feel that they are engaging with the communities; on the other hand, the communities respond out of desperation of need for water services. The communities feel excluded. The communities see the water problems confronting them as a denial of their right to water.

There is, therefore, an urgent need for municipalities to review their mode of engagement with their communities. The current processes of engagement are passive and fail to secure the interests and commitment of the communities. The municipalities need to develop communication strategies that are inclusive and create a voice communities. The development of for the a communication strategy should be a negotiated programme where community members together with the municipality agree on a participation space in the activities and determine their inputs and benefits. This will generate a feeling of ownership and a sense of responsibility. It will avoid a situation where communities are told to join a pre-determined communication strategy where their main input is reporting on broken pipes and dysfunctional systems, while this is good, there is a need to go beyond reporting on negatives only. The menu of interactions of the communication strategy should include a variety of collaborations that go beyond the conventional meetings and campaigns that communities perceive as mechanisms aiming at municipalities either imposing ideas or correcting dysfunction. Communication is more than just verbal language, therefore. the forms of communication need to be explored as well as the different conventional and social media platforms for different users in the community. The communities need to be given an opportunity to make input on the menu of interactions between themselves and the municipality. Since the research



focused on water management in different regions, the selected variables would likely behave differently if utilised in a single country. Furthermore, given the different levels of development and different cultures in different countries, it is likely that certain variables would produce inconclusive results depending on how these are analysed. Future, research needs to identify the training needs and relevant capacities in the interface between municipalities and communities so as to promote good governance in the water supply.

REFERENCES

- 1. Alfred Nzo District Municipality. (2017). *Socio economic review and outlook*. Eastern Cape Social Economic Consultative Council. Retrieved from https://www.ecsecc.org/datarepository/documents/alfred-nzo-district-municipality_80763.pdf
- 2. Alozie, E. N. (2017). Assessing the Influence of micro finances on improving poverty status of households in Abia State. *International Journal of Advanced Studies in Economics and Public Sector Management*, *5*(1), 105–113. Retrieved from http://www.internationalpolicybrief.org/images/2017/ASEPSM/ARTICLE-7.pdf
- 3. Ananga, E. O., Agong', S. G., Acheampong, M., Njoh, A. J., & Hayombe, P. (2020). Examining the effect of community participation on beneficiary satisfaction with the work of water management committee in urban community-based operated water schemes. *Sustainable Water Resources Management*, *6*, 1–13. https://doi.org/10.1007/s40899-020-00408-5
- 4. Bennett, K. (2017). *Outcomes of community engagement in neighbourhood renewal: Community confidence, participation and asset based community development* (Doctoral dissertation, Murdoch University). Retrieved from https://researchrepository.murdoch.edu.au/id/eprint/41318/1/Bennett2017.pdf
- 5. Boakye, M. K., & Akpor, O. B. (2012). Community participation in water resources management in South Africa. *International Journal of Environmental Science and Development*, *3*(6), 511–516. https://doi.org/10.7763 /IJESD.2012.V3.277
- 6. Bryman, A., & Becker, S. (2012). Combining quantitative and qualitative research. In S. Becker, A. Bryman, & H. Ferguson (Eds.), *Understanding research for social policy and social work: Themes, methods and approaches* (2nd ed.). Bristol, the UK: Policy Press.
- 7. Chirenje, L. I., Giliba, R. A., & Musamba, E. B. (2013). Local communities' participation in decision-making processes through planning and budgeting in African countries. *Chinese Journal of Population Resources and Environment*, *11*(1), 10–16. https://doi.org/10.1080/10042857.2013.777198
- 8. Chivanga, S. Y., & Kang'ethe, S. M. (2015). The panacea of effectuating land reforms in South Africa as a strategy to indigenise the South African economy. *Journal of Human Ecology*, *49*(3), 273–280. https://doi.org/10.1080/09709274.2015.11906845
- 9. Chivanga, S. Y., & Monyai, P. (2019). From the darling of the superpowers to a pariah state: Zimbabwe's Official Development Assistance journey. *African Journal of Democracy and Governance, 6*(4), 51–76. Retrieved from https://journals.co.za/doi/abs/10.10520/EJC-1eefe630b4
- 10. Chivanga, S. Y., & Monyai, P. B. (2021). Back to basics: Qualitative research methodology for beginners. *Journal of Critical Reviews, 8*(2), 11–17. Retrieved from https://ru.scribd.com/document/538893014/Back-to-Basics-Qualitative-Research
- 11. Claassen, M. (2013). Integrated water resource management in South Africa. *International Journal of Water Governance*, *1*(3-4), 323-338. https://doi.org/10.7564/13-IJWG12
- 12. Cole, M. J., Bailey, R. M., Cullis, J. D. S., & New, M. G. (2018). Spatial inequality in water access and water use in South Africa. *Water Policy*, *20*(1), 37–52. https://doi.org/10.2166/wp.2017.111
- 13. Cunha, D. G., Marques, J. F., de Resende, J. C., de Falco, P. B., de Souza, C. M., & Loiselle, S. A. (2017). Citizen science participation in research in the environmental sciences: Key factors related to projects' success and longevity. *Anais da Academia Brasileira de Ciências*, *89*(3), 2229–2245. https://doi.org/10.1590/0001-3765201720160548
- 14. Heritage, Z., & Dooris, M. (2009). Community participation and empowerment in Healthy Cities. *Health Promotion International, 24*(suppl1), i45-i55. https://doi.org/10.1093/heapro/dap054
- 15. Herrfahrdt-Pähle, E. (2014). Applying the concept of fit to water governance reforms in South Africa. *Ecology and Society*, *19*(1), 25. https://doi.org/10.5751/ES-05964-190125
- 16. Heyd, H., & Neef, A. (2004). *Participation of local people in water management: Evidence from the Mae Sa Watershed, Northern Thailand* (EPTD Discussion Paper No. 128). https://doi.org/10.2139/ssrn.644361
- 17. Hove, J., D'Ambruoso, L., Mabetha, D., van der Merwe, M., Byass, P., Kahn, K., & Twine, R. (2019). 'Water is life': Developing community participation for clean water in rural South Africa. *BMJ Global Health*, *4*(3), 1–13. https://doi.org/10.1136/bmjgh-2018-001377
- Karuaihe, S., Mosimane, A., Nhemachena, C., & Kakujaha-Matundu, O. (2014). Rural water access and management approaches in southern Africa: Lessons from Namibia and South Africa. *Journal of Environmental Science and Engineering*, *B*(3), 332–344. Retrieved from http://www.davidpublisher.com/Public/uploads /Contribute/550789d0a62c8.pdf
- 19. Kidd, M. (2019). Pollution of water in South Africa by untreated sewage: Addressing the governance issues. In P. Kameri-Mbote, O. C. Ruppel, E. D. Kam Yogo, A. Paterson, & B. B. Orubebe (Eds.), *Law Environment Africa* (pp. 411–428). Nomos Verlagsgesellschaft mbH and Co. KG. https://doi.org/10.5771/9783845294605-411
- 20. Lemanski, C. (2016). Poverty: Multiple perspectives and strategies. *Geography*, *101*(1), 4–10. https://doi.org/10.1080/00167487.2016.12093977
- 21. Mkize, O. S. (2021). Limited access to safely managed water in resource poor rural contexts: A photovoice study of adult experiences in KwaZulu-Natal, South Africa (Doctoral dissertation, University of KwaZulu-Natal). Retrieved from https://ukzn-dspace.ukzn.ac.za/handle/10413/19919
- 22. Moore, L., Steynor, A., Waagsaether, K. L., Spires, M., & Marie, A. (2021). Exploring the opportunities and constraints to the development of locally applicable water management technology in three sub-Saharan African cities. *Environmental Science & Policy*, *120*, 108–117. https://doi.org/10.1016/j.envsci.2021.02.010

VIRTUS

- 23. Moyo, S., Ncube, N., Chikoko, V., Mtezo, J., Chisi, R., Gombe, J., ... Kangai, C. V. (2002). *Dissertation guidelines for the master of education in educational administration, planning and policy studies* (Module DEA 570). Harare, Zimbabwe: Zimbabwe Open University.
- 24. Mudombi, S (2020). Unpacking water and sanitation access in South Africa: A renewed call for more action (Trade & Industrial Policy Strategies Working Paper). Retrieved from https://www.tips.org.za/research-archive/inequality-and-economic-inclusion/item/download/1843_6142986b7de6729c7f47178f5215a83b
- 25. Samah, A. A., & Aref, F. (2009). People's participation in community development: A case study in a planned village settlement in Malaysia. *World Rural Observations,* 1(2), 45–54. Retrieved from http://www.sciencepub.net /rural/0102/wro09_0102_07_45_54.pdf
- 26. Statistics South Africa. (2016). Community survey 2016. Pretoria, South Africa: Statistics South Africa.
- 27. Statistics South Africa. (2019). General household survey 2014. Pretoria, South Africa: Statistics South Africa.
- 28. United Nations (UN). (2015). *Water for a sustainable world* (UN World Water Development Report). Retrieved from https://www.unwater.org/publications/un-world-water-development-report-2015
- 29. United Nations (UN). (2018). *6 Clean water and sanitation* (Sustainable Development Goal 6: Synthesis report on water and sanitation). United Nations. Retrieved from https://sustainabledevelopment.un.org/content /documents/19901SDG6_SR2018_web_3.pdf
- 30. Vhumbunu, C. H. (2021). Counting down to day zero: Exploring community-based water management strategies in Western Cape Province drought, South Africa (2017/2018). In R. Djalante, M. B. F. Bisri, R. Shaw (Eds.), *Integrated research on disaster risks* (pp. 193-212). Springer, Cham. https://doi.org/10.1007/978-3-030-55563-4_11

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